AIR WAR COLLEGE

AIR UNIVERSITY

DEVELOPING A USEUCOM INTELLIGENCE, SURVEILLANCE AND RECONNAISSANCE STRATEGY FOR FISCAL YEARS 2010 THRU 2015

by

Kevin M Coyne, Lt Col, USAF

A Research Report Submitted to the Faculty

In Partial Fulfillment of the Graduation Requirements

10 February 2009

DISCLAIMER

The views expressed in this academic research paper are those of the author and do not reflect

the official policy or position of the US government or the Department of Defense. In accordance

with Air Force Instruction 51-303, it is not copyrighted, but is the property of the United States

government.

Contents

Biography

Lt Col Kevin M. Coyne is currently assigned as a student, Air War College, Air Education and Training Command, Maxwell AFB, Alabama. Lt Col Coyne is a career intelligence officer with 20 years of Signals Intelligence experience at the operational and headquarters level. He has served as Commander, 390th Intelligence Squadron, Kadena AB, Japan, the Joint Staff/J2 Battlespace Awareness Functional Capabilities Board Chair and Operations Officer, 488th Intelligence Squadron, RAF Mildenhall, UK. Prior to this, Lt Col Coyne served as the RC-135 Program Element Monitor, HQ USAF, the Pentagon, and was responsible for a total operating budget of $4.6B supporting aircraft and sensor procurement for all variants of the RC-135 fleet, to include operations and maintenance, personnel funding and research and development. Significant accomplishments include the re-engining of the RC-135 fleet and the delivery of Baseline 7, the newest evolution of RC-135 sensor enhancements. At the 97IS, Offutt AFB, Nebraska, Lt Col Coyne served both as the Chief, Current Operations and Chief, Force Applications, providing airborne crypto-linguist support to RC-135 RIVET JOINT, COBRA BALL and COMBAT SENT operations. During his tour at HQ USAFE, he served as an Intelligence Watch Officer and as the USAFE/IN's focal point for certain intelligence relationships with NATO partners. While assigned to HQ USAFE/INXY, he was charged with overseeing the functional employment of theater signals intelligence systems and working reconnaissance employment issues on behalf of the USAFE/IN. Lt Col Coyne served as a Flight Commander at signals intelligence units in Korea and Greece supporting U-2 and RC-135 operations, and has deployed in support of Operations IRAQI FREEDOM, SOUTHERN and NORTHERN WATCH, and NATO's Bosnia Implementation Force.

Introduction

"Intelligence analysts…must open their doors to anyone who is willing to exchange information, and this includes Afghans and non-governmental organizations as well as the US military and its allies."
        - Major General Michael T. Flynn, USA

"Our number one priority is the current fight, which means the fight in Central Command,"[1] remarked United States Air Forces in Europe (USAFE) commander General Roger Brady, highlighting a major challenge facing most of today's theater component and combatant commanders. As the United States (US) continues to fight overseas contingency operations (OCO) in Afghanistan and Iraq, the nation's warfighting resources remain dedicated to prevailing in today's wars.[2] This study will examine how America's OCO focus in United States Central Command (USCENTCOM) impacts the operations of other commands by analyzing United States European Command's (USEUCOM) ability to execute an effective intelligence, surveillance and reconnaissance (ISR) strategy in pursuit of its intelligence requirements..

After a brief discussion of the impact of ISR operations in USEUCOM during the 1990s, a review of national and Air Force-specific strategies and their impact on USEUCOM's strategy of active security will be provided. This will be followed by an overview of the specific threats to US national security interests in the USEUCOM AOR, the command's responsibilities versus these threats and whether USEUCOM is meeting its responsibilities and requirements given the ISR resources allocated. Thus, a three-tiered mitigation strategy is proposed. First, a long-term solution recommends USEUCOM ISR planners mitigate command collection gaps through the use of the North Atlantic Treaty Organization's (NATO) Alliance Ground Surveillance (AGS) system scheduled for delivery in 2014. Second, a proposed mid-term solution is to team with the

---

[1] Hoffman, Michael. "USAFE Bases Key to Building, Maintaining Ties." *Defensenews*, 21 September 2009.
[2] US Department of Defense. *Quadrennial Defense Review Report*. Washington, DC: Office of the Secretary of Defense, 2010, iii.

Royal Air Force (RAF) to begin planning the integration of US-purchased RC-135 RIVET JOINT aircraft into USEUCOM ISR collection profiles. Finally, a near-term solution suggests USEUCOM engage with the German Air Force (GAF) to develop tactics, techniques and procedures (TTPs) for combined post-mission processing of EuroHawk-derived Signals Intelligence (SIGINT) to meet command collection requirements. With most ISR assets still dedicated to supporting OCO in USCENTCOM, this paper contends hat other theaters competing for remaining scarce ISR resources such as USEUCOM, develop requirements-based collection strategies that better integrate current and planned allied capabilities to off-set collection shortfalls.

ISR in USEUCOM—The 1990s

USEUCOM witnessed a highpoint of theater ISR collection operations in the 1990s due to the Balkan crises in Croatia, Bosnia-Herzegovina and Kosovo. In 1995 the Bosnian civil war was in its third year; by that summer, the international community coalesced to put an end to the conflict by attempting to coerce the Bosnian Serbs to the negotiating table through an air campaign primarily targeting their heavy weapons. Operation Deliberate Force lasted from 30 August to 14 September 1995, with airborne ISR sensors playing a critical role in verifying Bosnian Serb compliance "by obtaining needed combat information in the planning, execution and combat assessment phase"[3] of the operation. The U-2 and Predator in particular played key roles in monitoring Bosnian Serb heavy weapons sites and assessing "whether the Serbs were withdrawing, or at least demonstrating an intention to withdraw."[4]

ISR contributions to the success of Deliberate Force were significant; not only to real-time strike decisions, but also in highlighting the contributions of allied ISR capabilities. In fact,

---

[3] Owen, Robert C. *Deliberate Force: A Case Study in Effective Air Campaigning.* Maxwell AFB, AL: Air University Press, 2000, 234.
[4] Ibid., 228.

"five nations employed 13 different manned or unmanned recce platforms for purposes that included monitoring heavy weapons as well as making assessments."[5] British, French, German and Dutch tactical and select strategic reconnaissance aircraft were integrated with US ISR assets in a combined Air Tasking Order (ATO) to add "to the total information available to the CAOC."[6] In sum, while Deliberate Force validated both the criticality of US and allied ISR assets to the joint-combined fight, it also demonstrated how allied ISR capabilities could be seamlessly integrated with US operations.

Renewed violence in the Balkans from March to June 1999 due to the Kosovo crisis affected US ISR programs, had an impact on future ISR asset availability, and highlighted shortfalls in connecting allied ISR capabilities to the US' federated intelligence architecture. In an after-action lessons learned report to Congress on Operation Allied Force, the Chairman of the Joint Chiefs of Staff (CJCS) General Shelton and Secretary of Defense (SecDef) Cohen, notified Congress of the Defense Department's (DoD's) increased investments in ISR programs by approximately $2.5 billion for sensors, aircraft, and tasking, production, exploitation, and dissemination (TPED) capabilities.[7] In their view, "better sensors with improved dissemination capabilities are needed to provide a capability to counter any future adversary."[8] The critical need for more UAVs and greater TPED capacity was especially compelling due to the low-density and high-demand (LD/HD) of manned ISR aircraft such as the U-2 and the RC-135, which were "especially critical since they also support multiple intelligence activities in other areas around the world."[9] Thus DoD leaders were aware how competing intelligence requirements impeded their ability to provide combat mission ready ISR forces in sufficient

---

[5] Ibid., 223.
[6] Ibid., 228.
[7] US Department of Defense. *Report to Congress: Kosovo/Operation Allied Force After Action Report.* Washington, DC: Office of the Secretary of Defense and the Chairman of the Joint Chiefs of Staff, 200, 3 of 4.
[8] Ibid., xxii.
[9] Ibid., 54.

numbers. In sum, LD/HD assets needed to be more carefully managed and even then, their availability could not be guaranteed.

Finally, the CJCS and SecDef stressed that "the Department must develop a clear policy and implementation plan to explain when and how coalition partners can be connected to US networks and how data can be shared with those partners."[10] In their view, one solution to the US TPED challenge was thru increased reach-back to US-based processing capacity. In addition, they believed allied partners contributing ISR assets to a joint-combined campaign should be able to benefit and share in the intelligence output. This study takes the Kosovo lessons learned recommendation one step further, and argues that our allies integrate their sensor and TPED capacity into the US Intelligence Community's (IC's) federated architecture and assist in the production process. This simple step of creating seamless US and allied intelligence production and information sharing, still not a reality ten years after the Kosovo after action report, could readily help the USEUCOM combatant commander begin to meet unfulfilled collection requirements due to limited ISR resources.

Unfortunately, DoD calls for greater ISR investments and process overhauls did not come in time to meet the challenges caused by the terror attacks of 9/11. Still reconstituting after Operation Allied Force, US ISR assets and personnel surged to meet USCENTCOM requirements during Operation Enduring Freedom in October 2001. The surge in ISR operations exceeded steady-state operating levels for Service ISR assets and continues today to impact the requirements of other COCOMs. Today, USCENTCOM collection requirements absorb the majority of US ISR assets, with other COCOM requirements being met by residual US ISR assets on a shared or rotational basis.

---

[10] Ibid., 131.

ISR Strategy Review

Against this background we will conduct a US ISR strategy review. This review will not only re-emphasize and highlight US priorities, but also offer strategic areas where competing theaters can explore ways to leverage allied ISR capabilities to meet their needs. The 2006 National Security Strategy (NSS) stresses three major threats to American and allied interests: global terrorism, defusing regional conflicts and preventing the threat of Weapons of Mass destruction (WMD).[11] Aside from strengthening US intelligence capabilities, especially against the WMD threat, working with allied power centers and strengthening relations with them is critical to countering these threats. To strengthen this partnership and make it more effective, the leveraging of "NATO capabilities must be accelerated."[12] America's 2006 NSS for Combating Terrorism takes this one step further, and calls for the expansion of partner capacity in the realm of intelligence and providing friendly states with training, equipment and assistance they need to partner with the US.[13]

The 2009 National Intelligence Strategy (NIS) complements the two aforementioned national strategies in the priorities for the IC writ large. The first two mission objectives outlined by the Director of National Intelligence (DNI) deal with combating extremism and WMD proliferation respectively, while the third objective concerns strategic intelligence and warning and the monitoring of events so "policymakers and military officials can effectively deter, prevent or respond to threats and take advantage of opportunities."[14] Interestingly, the NIS also calls on the IC to improve collaboration and "conduct strategic outreach to key external centers

---

[11] The White House. *The National Security Strategy of the United States.* Washington, DC: Office of the President of the United States, 2006, 1.
[12] Ibid., 38.
[13] The White House. *National Security Strategy for Combating Terrorism.* Washington, DC: Office of the President of the United States, 2006, 19.
[14] US Director of National Intelligence. *The National Intelligence Strategy.* Washington, DC: Office of the Director of National Intelligence, 2009, 7.

of knowledge and expertise."[15] The DNI's message on leveraging allied partnerships is clear: due to worldwide threats of extremism and WMD and the necessary strategic warning nation states require, efficiency of scale in meeting these global challenges can only be achieved through collaboration with our allies.

Leveraging and expanding allied capabilities, and coming to terms with efficiently managing LD/HD ISR assets, is a DoD-level issue. First, to address the problem of LD/HD asset management and developing an ISR strategy, the 2006 Quadrennial Defense Review (QDR) established a Joint Functional Component Command-Intelligence, Surveillance and Reconnaissance (JFCC-ISR) under US Strategic Command to "synchronize strategy and planning and integrate all national, theater and tactical ISR capabilities."[16] JFCC-ISR is responsible for arbitrating competing command collection requirements and allocating ISR resources. With US intelligence focused on USCENTCOM however, JFCC-ISR processes do not guarantee an asset increase for competing COCOMs. Secondly, the QDR also addressed the criticality of bolstering allied capabilities and directed investments to stand up NATO's planned intelligence fusion cell, which would reside within USEUCOM. The fusion cell could help service the command's intelligence requirements if leveraged effectively.

The 2010 QDR continues the trend of expanding DoD ISR capabilities through greater investments in "long-dwell Unmanned Aircraft Systems (UASs), such as the Predator and Reaper."[17] Already on track to grow the number of Predator/Reaper 0rbits from 37 to 50 by FY

---

[15] Ibid., 8.

[16] US Department of Defense. *Quadrennial Defense Review Report.* Washington, DC: Office of the Secretary of Defense, 2006, 56.

[17] US Department of Defense. *Quadrennial Defense Review Report*. Washington, DC: Office of the Secretary of Defense, 2010, 22.

2011, the Air Force is now committed to increasing the number to 65 by FY 2015; the Army will expand all classes of UASs.[18]

Problematic for USEUCOM however, is that this increase in ISR capability is intended for counterinsurgency, stability, and counterterrorism operations.[19] As SecDef Gates pointed out during the official release of the QDR, "we have to a considerable extent stripped the other combatant commands of much of their ISR capability to put into the fight in Iraq and Afghanistan. The reality is, there is a huge demand all over the world for these capabilities.[20] As long as contingency operations in Afghanistan and Iraq are ongoing, the QDR's increase in ISR investments will largely go to meet the requirements of those conflicts and the stripping of ISR assets from other commands will continue. The 2010 QDR does however continue the theme of leveraging partner capacities as an "important dimension of US defense strategy."[21] USEUCOM must look toward greater engagement with its allies to overcome intelligence collection shortfalls and information gaps.

At a Service level, the Air Force's 2006 Security Cooperation Strategy (SCS) is in line with the DNI's vision of increased intelligence cooperation with partner nations. In fact, the SCS states that "intelligence relationships provide a means of unique access to data that the US might be otherwise unable to obtain."[22] Our partners however must have the capabilities and the capacity to obtain such information and, if they do, these capabilities can be used to satisfy US "global and regional objectives."[23] The SCS speaks directly to USEUCOM's dilemma of not being able to satisfy all its collection requirements due to lack of ISR resources and, from a DoD

---

[18] Ibid., 22.

[19] Ibid., 20.

[20] US Department of Defense. "DoD News Briefing with Secretary Gates and Admiral Mullen from the Pentagon." http://www.defense.gov/transcripts/transcript.aspx?transcriptid=4549

[21] Ibid., viii.

[22] Department of the Air Force. *Security Cooperation Strategy: Building Capacity, Integrating Capabilities.* Washington, DC: Office of the Secretary of the Air Force, 2006, 10.

[23] Ibid., 10.

perspective, provides a possible strategy for leveraging allied capabilities to meet COCOM needs. This is of critical importance in light of the United Kingdom's RC-135 Foreign Military Sales (FMS) procurement effort and the German Air Force's (GAF) Direct Commercial Sale (DCS) effort to procure the RQ-4 Global Hawk.

Air Force security cooperation objectives are important, but do they coincide with Air Force ISR strategy goals? A review of the Service's 2008 strategy for ISR lacks any mention of partnering with allies, expanding allied capacity, or leveraging allied unique ISR capabilities to satisfy US national or COCOM collection requirements. This does not mean however the SCS and ISR strategies contradict each other. While there is no specific mention of partnering with allies, the Air Force's ISR strategy does stress the criticality of "global cross-domain integrated knowledge dissemination."[24] At the heart of this effort is the Distributed Common Ground Station (DCGS) intelligence processing architecture. Allies investing in ISR capabilities compatible with DCGS, like the GAF's RQ-4 procurement effort, could be easily integrated into the Air Force's DCGS architecture.

USEUCOM's strategy of Active Security is fully in line with the three major threats found in the 2006 US NSS. USEUCOM's mission statement calls for maintaining ready forces for global operations, securing strategic access and global freedom of action, strengthening NATO, promoting regional stability and countering terrorism.[25] The command does this through two regional plans for Europe and Eurasia, to prevent regional conflicts, and three functional plans, of which two are specifically designed to combat terrorism and prevent the proliferation of WMD. The third functional plan focuses on theater force posture and transformation, and

---

[24] Department of the Air Force. *Lead Turning the Future: The 2008 Strategy for United States Air Force Intelligence, Surveillance and Reconnaissance.* Washington, DC: Office of the Deputy Chief of Staff for Intelligence, Surveillance and Reconnaissance, 2008, 14.
[25] US European Command. *A Strategy of Active Security.* Stuttgart, Germany: Office of the Commander, United States European Command, 2008, 2.

stresses that while a forward US presence is critical for theater security, teaming with partners is just as important. "The posture of our forces and installations is shaped as much by our security cooperation activities as by our requirements for warfighting."[26] Thus, a large part of the COCOM's strategic approach to dealing with regional threats is to "mitigate risk while the [US] is at war through building partner capacity and enhancing interoperability."[27]

The Way Ahead: Utilizing NATO Capabilities

While traditionally lacking in quantity and quality, European airborne ISR capacity is seeing significant expansion in both areas. As a potential long-term solution for USEUCOM's lack of airborne ISR, this study proposes increased cooperation with NATO, as the alliance prepares for the 2012-2014 scheduled Full Operational Capability (FOC) of its interoperable AGS system.[28] In September 2007, the 21 participating AGS nations abandoned an initial multi-platform concept for a single air vehicle approach utilizing the RQ-4 GLOBAL HAWK Block 40. The Multi-Platform Radar Technology Insertion Program (MP-RTIP) ground surveillance radar will be the primary sensor.[29] The AGS's "Core" segment includes line-of-sight and beyond line-of-sight connectivity, as well as on-site data processing and exploitation capabilities. With Sigonella Italy destined to be the main operating base, NATO will for the first time have a dedicated ISR collection capability.[30] The most promising benefit of the AGS Core segment however, are its fully equipped interfaces and interoperability with national ISR systems. "The Core system will be supplemented by interoperable national airborne stand-off ground surveillance systems from NATO countries, thus forming a system of systems."[31] This is no

---

[26] Ibid., 5.
[27] Ibid., 3.
[28] Defense Industry Daily. "NATO Sign Initial $26M Contract for AGS Eye in the Sky." http://www.defenseindustrydaily.com/nato-signs-initial-26m-contract-for-ags-eye-in-the-sky-0450/
[29] Northrop Grumman. "NATO AGS" http://www.as.northropgrumman.com/products/natoags/index.html
[30] North Atlantic Treaty Organization. "Alliance Ground Surveillance." http://www.nato.int/issues/ags/index.html
[31] Ibid.

small undertaking for NATO. Until AGS, NATO never had its own intelligence collection capability, but instead relied on the national assets of member states. Challenges in developing proper tactics, techniques and procedures (TTPs) for platform and Core segment mission operations will abound.

NATO traditionally does not conduct its own intelligence collection. In fact, NATO's Intelligence Warning System (NIWS), with the NATO Situation Centre at its hub, is primarily an analytical function that relies on information feeds from a variety of sources that include NATO-releasable messages from member states and information provided by the NATO political and military committees. This structure created a dependency on national architectures with no ability by NATO to leverage those architectures. This offered little value-added to the nations providing the bulk of the information, i.e., the US and USEUCOM.[32] "The ability of a nation to provide intelligence, the willingness of a nation to share this intelligence and the time required for this intelligence to be disseminated to NATO are all constraining factors which compromise the overall NATO intelligence effort."[33] The FOC of the NATO AGS in 2014 will change this dynamic. By acquiring an indigenous collection capability, NATO will be both a collector and producer of intelligence, and no longer depend solely on member states. European ISR strategists such as Klaus Becher see this as an opportunity for greater transatlantic cooperation because NATO will finally have the leverage to request greater "access to US capabilities."[34] In fact, "Europe's access to US-controlled intelligence on global security issues will depend on the practical value of European assets to US intelligence."[35]

---

[32] Kriendler, John. *NATO Intelligence and Early Warning.* Watchfield, UK: Defence Academy of the United Kingdom, Conflict Studies Research Centre, 2006, 5-6.
[33] Ibid., 4.
[34] Becher, Klaus. "European Intelligence Policy: Political and Military Requirements." In *Towards a European Intelligence Policy,* edited by Alessandro Politi, 46-58. Paris, France: Institute for Security Studies of the Western European Union, 1998, 52.
[35] Ibid., 53.

AGS will provide practical value as its pending FOC date offers USEUCOM an opportunity to satisfy collection gaps. As DCGS stakeholders, USAFE and USEUCOM maintain the knowledge and expertise on how to conduct RQ-4 operations and post-mission processing in their AOR. This study recommends the command engage with NATO now, to develop the requisite TTPs for proper Core system utilization the alliance currently lacks. This especially makes sense given the projected basing of three new Block 30 RQ-4s to Sigonella Air Base, Italy, in October 2010. These aircraft will be operated by USEUCOM within the constraints of the JFCC-ISR allocation process.[36]

Helping NATO develop TTPs for post-mission processing is one way to gain access to AGS sensors. However, this study also recommends USEUCOM champion greater NATO access to US intelligence collection capabilities and information to build the enhanced atmosphere of cooperation proposed by Becher. This will improve the effectiveness of AGS operations, and lead to a revolution in intelligence sharing given the "NOFORN" barrier the US IC currently uses to deter unwanted access. As a RAND study on intelligence process reform recently argued, "for the intelligence community, operational innovation must focus on changing and perhaps completely rethinking core functions."[37] By helping NATO navigate the uncharted waters of operational intelligence collection and processing at the start of the AGS program, USEUCOM will be in a better position four years from now to leverage AGS capability. This initiative will have far-reaching effects by complementing ongoing efforts of the Information Sharing Integrated Process Team (IPT) sponsored by DoD's ISR Task Force. Based largely on the experiences of working with our allies in Afghanistan, the IPT seeks to transcend cultural, technical, and arcane classification barriers that prohibit the free-flow exchange of intelligence

---

[36] Kington, Tom. "USAF Global Hawks to Patrol Europe, Africa from 2011." *Defense News,* 25 January 2010.
[37] Barger, Deborah G. *Toward a Revolution in Intelligence Affairs.* RAND Technical Report. Santa Monica, CA: National Security Research Division, 2005.

information with our allies. At a minimum, the results of the IPT will lead to a transformation of the DoD's foreign disclosure and classification procedures if not its core intelligence processes. USEUCOM could set the new standard for the DoD's information sharing process with our allies.

The Way Ahead: Utilizing Bi-lateral Relationships

Mid- and near-term solutions to USEUCOM ISR collection gaps can be found in existing bi-lateral partnerships. Many changes are underway in the development and fielding of allied capabilities that promise to alleviate the "fragile dependence" mentioned above. Both the United Kingdom's (UK) RAF and the Federal Republic's GAF are in the process of leveraging and procuring US ISR technologies to meet their national intelligence requirements. There is no reason why USEUCOM and USAFE should not work with our allies to fully integrate their systems into USEUCOM's ISR collection profiles and fill command collection gaps. Due to severe cost overruns of Project HELIX, the replacement program for the UK's ageing NIMROD aircraft, the UK approached the US in 2007 to inquire about procuring three RC-135 RIVET JOINT aircraft. Approved by the USAF Chief of Staff in 2008, and with congressional approval, the US and UK are now engaged in a FMS contract to deliver three RC-135 Signals Intelligence (SIGINT) aircraft. Both HAF/A2 and the DNI describe this effort as "win-win" for both parties and an opportunity to improve integration.[38] Fully in line with national strategy direction to engage with allies and harness their capabilities, the main objectives of this FMS contract addresses the command's "capability gaps through operational burden sharing"[39] and focuses on "maintaining and/or increasing manned SIGINT support to CENTCOM and EUCOM AORs."[40]

---

[38] Briefing. Headquarters United States Air Force, Directorate for Intelligence, Surveillance and Reconnaissance. Subject: US-UK RC-135V/W RIVET JOINT Cooperative Program, 2009, slides 5-6.
[39] Ibid., slide 9.
[40] Ibid., slide 17.

With the first of three aircraft scheduled for delivery in 2013,[41] RAF aircrews are now being trained on aircraft employment and utilization. The RAF's RC-135 aircraft will provide a unique mid-term solution to help satisfy USEUCOM ISR collection gaps. The command should engage with the RAF now, through existing bi-lateral programs, and leverage in-theater Air Combat Command RC-135 expertise at RAF Mildenhall to plan the integration of the RAF's RC-135 aircraft into USEUCOM's theater ISR collection profiles.

In the immediate future, a near-term opportunity to overcome USEUCOM's collection capability shortfalls presents itself in the GAF's fielding of the RQ-4 Block 20 "EuroHawk" Unmanned Aircraft System (UAS). After a transatlantic test flight and associated sensor demonstration from Nordholz, Germany, in 2003, the GAF signed a Memorandum of Understanding with the DoD in May of 2006 that set the parameters for proceeding with a DCS contract of five RQ-4 UASs.[42] The roll-out of the first EuroHawk vehicle was on 8 October 2009 in Palmdale, California.[43] Current plans call for incorporating all five RQ-4 aircraft into the GAF's 51 Squadron, Jagel Air Base, Schleswig Holstein, by 2011.[44] The GAF plans to use the RQ-4 in theater, rather than deploying them to Afghanistan. Germany is also procuring the HERON 1, a medium altitude UAS from Israel, for use in overseas contingency deployments. With a total of five GAF-operated RQ-4s in their AOR by 2011, USEUCOM has a unique teaming opportunity to increase theater ISR collection capability through the GAF.

---

[41] Briefing. Aeronautical Systems Center. Subject: RIVET JOINT 101, 21 July 2009, slide 9.
[42] Luftwaffe. "Vorstellung des Ersten EURO HAWK."
http://www.luftwaffe.de/portal/a/luftwaffe/kcxml/04_Sj9SPykssy0xPLMnMz0vM0Y_QjzKLNzKId_dxB8lB2F7O-pFw0aCUVH1vfVP_NxU_QD9gtyIckdHRUUAl64xJQ!!/delta/base64xml/L2dJQSEvUUt3QS80SVVFLzZfMjBfR0xH?yw_contentURL=%2F01DB060000000001%2FW27WNAUE804INFODE%2Fcontent.jsp
[43] Ibid.
[44] Luftwaffe. "Mit Adleraugen."
http://www.luftwaffe.de/portal/a/luftwaffe/kcxml/04_Sj9SPykssy0xPLMnMz0vM0Y_QjzKLNzKId_cJAclB2QH6kZiiXs5IokEpqfre-r4e-bmp-gH6BbmhEeWOjooAVm-y1A!!/delta/base64xml/L2dJQSEvUUt3QS80SVVFLzZfMjBfMzAzMQ!!?yw_contentURL=/01DB060000000001/W27U5BL5218INFODE/content.jsp.html

One to way to engage the GAF is by offering US expertise in developing TTPs for post-mission processing of EuroHawk-derived SIGINT. Since the GAF procurement effort is a DCS contract, consisting only of the air vehicles and not the sensors (being developed by EADS), the GAF will not be getting a turn-key system. The 2003 ELINT sensor demonstration showed that the GAF will be faced with significant mission and post-mission processing challenges as it tries to operationalize its sensor packages. According to a GAF spokesman, we were "surprised at the huge amount of radar emitters (merchant ships, airliners) that showed up in addition to the prepared [demonstration] profile…the ELINT Ground Support Station (EGSS) was quickly overwhelmed."[45] The GAF realized there "was more data than we could process,"[46] leading one to conclude that a DCGS stakeholder like USEUCOM could provide tremendous expertise to help the GAF normalize RQ-4 operations while gaining access to GAF sensors. The author recommends USAFE expand its existing bilateral intelligence programs (traditionally focused on information sharing) to more dynamic agreements that include combined post-mission processing opportunities with allied militaries such as the GAF. The intelligence gain for USEUCOM of integrating GAF operators into USAFE's DGS-4 ground-station, or conversely, USAFE operators into the GAF's EGSS, will go a long way to help mitigate command ISR collection gaps.

Conclusion

This study shows that despite continued DoD investments in ISR platforms, these capabilities will remain LD/HD assets as long as the US is engaged in OCO in USCENTCOM. The Balkan conflicts of the 1990s proved ISR capabilities are force multipliers in the modern battle-space, prompting senior DoD leaders to take the rights steps in calling for more ISR

---

[45] Lok, Joris, J. "Global Hawk Demonstration Success Takes ISR Procurement One Step Closer*." Janes International Defense Review* 37, nos. 1-3 (January-March 2004): 58-62, 62.
[46] Ibid.

resources. These very same DoD leaders also acknowledged however, due to the increased demand for ISR, they would be hard-pressed to field sufficient numbers of ISR assets to meet global needs. After the 9/11 attacks of 2001 and subsequent surging of ISR forces to the USCENTCOM AOR, the ISR requirements from competing COCOMs could only be met through ISR rotational forces. This is still the case, causing collection gaps in all commands. Both national security and intelligence strategies, as well as USAF security cooperation and intelligence strategies, recognize that DoD ISR forces and capabilities are stretched thin. As this analysis demonstrates, national strategic direction provides guidance to warfighting commands to partner with allies and leverage their capabilities to help meet US national intelligence requirements. Intelligence is a field where synergistic efficiencies of cooperation can easily be achieved.

In sum, given that President Obama's Afghanistan strategy calls for a surge in US forces and capabilities through 2011, USEUCOM must continue to look to other sources to mitigate its ISR collection gaps. In light of significant advances in allied ISR capabilities, teaming with NATO, the RAF and the GAF presents itself as a unique opportunity for USEUCOM to bring about a revolution in intelligence sharing that could prove to be a bench-mark of security cooperation success for other COCOMs to emulate.

Bibliography

Althoff, Lt Col Joseph, US European Command Intelligence Directorate. Executive Summary Sheet. Report on USEUCOM Multi-Intelligence Observation and Collection Shortfalls (U), 16 March 2009.

Barger, Deborah G. *Toward a Revolution in Intelligence Affairs.* RAND Technical Report. Santa Monica, CA: National Security Research Division, 2005.

Becher, Klaus. "European Intelligence Policy: Political and Military Requirements." In *Towards a European Intelligence Policy,* edited by Alessandro Politi, 46-58. Paris, France: Institute for Security Studies of the Western European Union, 1998.

Briefing. Aeronautical Systems Center. Subject: RIVET JOINT 101, 21 July 2009.

Briefing. Headquarters United States Air Force, Directorate for Intelligence, Surveillance and Reconnaissance. Subject: US-UK RC-135V/W RIVET JOINT Cooperative Program, 2009.

Defense Industry Daily. "NATO Signs Initial $26M Contract for AGS Eye in the Sky." http://www.defenseindustrydaily.com/nato-signs-initial-26m-contract-for-ags-eye-in-the-sky-0450/

Department of the Air Force. *Lead Turning the Future: The 2008 Strategy for United States Air Force Intelligence, Surveillance and Reconnaissance.* Washington, DC: Office of the Deputy Chief of Staff for Intelligence, Surveillance and Reconnaissance, 2008.

Department of the Air Force. *Security Cooperation Strategy: Building Capacity, Integrating Capabilities.* Washington, DC: Office of the Secretary of the Air Force, 2006.

Hoffman, Michael. "USAFE Bases Key to Building, Maintaining Ties." *Defensenews,* 21 September 2009.

Kington, Tom. "USAF Global Hawks To Patrol Europe, Africa From 2011." *Defense News,* 25 January 2010.

Kriendler, John. *NATO Intelligence and Early Warning.* Watchfield, UK: Defence Academy of The United Kingdom, Conflict Studies Research Centre, 2006.

Lok, Joris, J. "Global Hawk Demonstration Success Takes ISR Procurement One Step Closer.*"*

Janes International Defense Review 37, nos. 1-3 (January-March 2004): 58-62.

Luftwaffe. "Mit Adleraugen."
http://www.luftwaffe.de/portal/a/luftwaffe/kcxml/04_Sj9SPykssy0xPLMnMz0vM0Y_Qj
zKLNzKId_cJAclB2QH6kZiiXs5IokEpqfre-r4e-bmp-gH6BbmhEeWOjooAVm-
y1A!!/delta/base64xml/L2dJQSEvUUt3QS80SVVFLzZfMjBfMzAzMQ!!?yw_contentU
RL=/01DB060000000001/W27U5BL5218INFODE/content.jsp.html

Luftwaffe. "Vorstellung des Ersten EURO HAWK."
http://www.luftwaffe.de/portal/a/luftwaffe/kcxml/04_Sj9SPykssy0xPLMnMz0vM0Y_Qj
zKLNzKId_dxB8lB2F7O-pFw0aCUVH1vfV-
P_NxU_QD9gtyIckdHRUUAl64xJQ!!/delta/base64xml/L2dJQSEvUUt3QS80SVVFLzZ
fMjBfR0xH?yw_contentURL=%2F01DB060000000001%2FW27WNAUE804INFODE
%2Fcontent.jsp

Marston, LCDR, US European Command Intelligence Directorate. Executive Summary Sheet.
Report on USEUCOM Airborne FY09 and FY10 Intelligence, Surveillance and
Reconnaissance Assets (U), 26 May 2009.

North Atlantic Treaty Organization. "Alliance Ground Surveillance."
http://www.nato.int/issues/ags/index.html

Northrop Grumman. "NATO AGS."
http://www.as.northropgrumman.com/products/natoags/index.html

Owen, Robert C. *Deliberate Force: A Case Study in Effective Air Campaigning.* Maxwell AFB,
AL: Air University Press, 2000.

The White House. *The National Security Strategy of the United States.* Washington, DC:
Office of the President of the United States, 2006.

The White House. *National Strategy for Combating Terrorism.* Washington, DC: Office of the
President of the United States, 2006.

US Department of Defense. *Quadrennial Defense Review Report.* Washington, DC: Office of
the Secretary of Defense, 2006.

US Department of Defense. *Quadrennial Defense Review Report.* Washington, DC: Office of
the Secretary of Defense, 2010.

US Department of Defense. "DoD News Briefing with Secretary Gates and Admiral Mullen
from the Pentagon."
http://www.defense.gov/transcripts/transcript.aspx?transcriptid=4549

US Department of Defense. *Report to Congress: Kosovo/Operation Allied Force After-Action*

Report. Washington, DC: Office of the Secretary of Defense and the Chairman of the Joint Chiefs of Staff, 2000.

US Director of National Intelligence. *The National Intelligence Strategy.* Washington, DC: Office of the Director of National Intelligence, 2009.

US European Command. *A Strategy of Active Security.* Stuttgart, Germany: Office of the Commander United States European Command, 2008.